| | Type | L # | Hits | Search Text | DBs | Time Stamp | Comments | Error Definition | Errors |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BRS | L6 | 22244 | macrophage | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:18 | | | 0 |
| 2 | BRS | L7 | 1246 | (reductive adj glutathione) or GSH | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:19 | | | 0 |
| 3 | BRS | L8 | 25 | 6 same 7 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:24 | | | 0 |
| 4 | BRS | L9 | 6900 | IL-6 or IL-12 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:25 | | | 0 |
| 5 | BRS | L10 | 2 | 8 same 9 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:25 | | | 0 |
| 6 | BRS | L11 | 3879 | th2 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:28 | | | 0 |
| 7 | BRS | L12 | 2 | 8 same 11 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:29 | | | 0 |
| 8 | BRS | L13 | 2282 | cellular adj immune adj response | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:29 | | | 0 |

| | Type | L # | Hits | Search Text | DBs | Time Stamp | Comments | Error Definition | Errors |
|---|---|---|---|---|---|---|---|---|---|
| 9 | BRS | L14 | 2 | 7 same 11 same 13 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:30 | | | 0 |
| 10 | BRS | L15 | 27984 | (gastrointestinal adj inflammatory adj disease) or (chronic adj rheumatoid adj arthritis) or hepatitis or (hepatic adj cirrhosis) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:31 | | | 0 |
| 11 | BRS | L16 | 4 | (8 or 14) same 15 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/11/07 14:32 | | | 0 |

=> d his

(FILE 'HOME' ENTERED AT 14:42:50 ON 07 NOV 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
14:43:29 ON 07 NOV 2002
L1 579964 S MACROPHAGE
L2 66366 S (REDUCTIVE GLUTATHIONE) OR GSH
L3 1015 S L1 (P) L2
L4 45057 S TH2
L5 26 S L3 (P) L4
L6 125526 S IL-6 OR IL-12
L7 17 S L5 (P) L6
L8 5 DUPLICATE REMOVE L7 (12 DUPLICATES REMOVED)
L9 20498 S CELLULAR IMMUNE RESPONSE
L10 0 S L9 (P) L5
L11 409933 S (GASTROINTESTINAL INFLAMMATORY DISEASE) OR (CHRONIC RHEUMATOI
L12 0 S L5 (P) L11

=> log y

FILE 'HOME' ENTERED AT 14:42:50 ON 07 NOV 2002

=> file medline caplus biosis embase scisearch agricola

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'MEDLINE' ENTERED AT 14:43:29 ON 07 NOV 2002

FILE 'CAPLUS' ENTERED AT 14:43:29 ON 07 NOV 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'BIOSIS' ENTERED AT 14:43:29 ON 07 NOV 2002


FILE 'EMBASE' ENTERED AT 14:43:29 ON 07 NOV 2002


FILE 'SCISEARCH' ENTERED AT 14:43:29 ON 07 NOV 2002


FILE 'AGRICOLA' ENTERED AT 14:43:29 ON 07 NOV 2002

=> s macrophage
L1 579964 MACROPHAGE

=> s (reductive glutathione) or GSH
L2 66366 (REDUCTIVE GLUTATHIONE) OR GSH

=> s l1 (p) l2
L3 1015 L1 (P) L2

=> s th2
L4 45057 TH2

=> s l3 (p) l4
L5 26 L3 (P) L4

=> s il-6 or il-12
L6 125526 IL-6 OR IL-12

=> s l5 (p) l6
L7 17 L5 (P) L6

=> duplicate remove l7
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L7
L8 5 DUPLICATE REMOVE L7 (12 DUPLICATES REMOVED)

=> d l8 1-5 ibib abs

L8 ANSWER 1 OF 5 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002269797 IN-PROCESS
DOCUMENT NUMBER: 22004751 PubMed ID: 12013506
TITLE: The skewing to Th1 induced by lentinan is directed through the distinctive cytokine production by macrophages with elevated intracellular glutathione content.
AUTHOR: Murata Yukie; Shimamura Toshiro; Tagami Tomoyuki; Takatsuki Fumihiko; Hamuro Junji
CORPORATE SOURCE: Basic Research Institute, Ajinomoto Central Research Laboratories, Ajinomoto Co. Inc., Kawasaki, Japan.
SOURCE: Int Immunopharmacol, (2002 Apr) 2 (5) 673-89.
Journal code: 100965259. ISSN: 1567-5769.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: IN-PROCESS; [illegible]
ENTRY DATE: Entered STN: [illegible]0020516
Last Updated on STN: 20020516

AB In vivo lentinan (LNT)-elicited peritoneal ***macrophages*** (Mps) showed the reduced release of prostaglandins (PGs), IL-10 and ***IL*** - ***6*** , while it endowed Mps with the elevated capability to produce ***IL*** - ***12*** and nitric oxide (NO) upon in vitro triggering, due to the elevated intracellular glutathione ( ***GSH*** ) content in Mps. Deprivation of intracellular ***GSH*** completely ablated the production of ***IL*** - ***12*** . Conversely, lipopolysaccharide (LPS) induced peritoneal Mps with the reduced intracellular ***GSH*** content and the reciprocal profile of mediator production. Mps with the elevated intracelluar ***GSH*** is arbitrarily termed as reductive Mp (RMp) and that with reduced amount as oxidative Mp (OMp). OMp was converted to RMp when ***GSH*** was replenished with glutathione monoethylester ( ***GSH*** -OEt). The IL-2 administration in combination with LNT exerted the synergistic induction of RMp, resulting in synergistic augmentation of ***IL*** - ***12*** , NO and reduction of ***IL*** - ***6*** production. It was also confirmed that CD4+T cells derived of LNT-administered mice showed augmented IFN-gamma and reduced IL-4 production upon in vitro anti-CD3 stimulation. Taken together it is concluded that skewing of Th1/ ***Th2*** balance to Th1 by a beta-(1-3)-glucan, LNT, is directed through the distinctive production of ***IL*** - ***12*** versus ***IL*** - ***6*** , IL-10 and prostaglandin E2 (PGE2) by Mps, depending on intracellular ***GSH*** redox status. To the efficient tumor immunotherapy, it may be one of the critical elements to induce a reductive form of Mps in tumor stromal tissues to maintain Th1 response.

L8 ANSWER 2 OF 5 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 2001272993 MEDLINE
DOCUMENT NUMBER: 21260833 PubMed ID: 11367535
TITLE: Suppression of allergic reactions by royal jelly in association with the restoration of macrophage function and the improvement of Th1/Th2 cell responses.
AUTHOR: Oka H; Emori Y; Kobayashi N; Hayashi Y; Nomoto K
CORPORATE SOURCE: Central Research Laboratories, Zeria Pharmaceutical Co., Ltd., 2512-1 Oshikiri, Kohnan-machi, Ohsato-gun, Saitama 360-0111, Japan.
SOURCE: Int Immunopharmacol, (2001 Mar) 1 (3) 521-32.
Journal code: 100965259. ISSN: 1567-5769.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010702
Last Updated on STN: 20010702
Entered Medline: 20010628

AB We studied the immunomodulatory effects of royal jelly (RJ), the principal food source of the queen honeybee. In this study, suppression of allergic reactions by RJ was investigated in DNP-KLH immunized mice (DNP-KLH mice). Oral administration of RJ (1 g/kg) to DNP-KLH mice significantly decreased the serum levels of antigen-specific Ig E and significantly inhibited DNP-KLH mediated-histamine release from mast cells, resulting in the suppression of immediate hypersensitivity reactions of ear skin. In DNP-KLH mice, IFN-gamma (Th1 cytokine) production from CD4+ T cells was suppressed and IL-4 ( ***Th2*** cytokine) production from CD4+ T cells was increased as compared to normal mice. On the other hand, RJ improved the balance of Th1/ ***Th2*** cell responses from ***Th2*** -dominant to Th1-dominant. RJ significantly increased ***GSH*** levels in ***macrophages*** from DNP-KLH mice. In addition, the administration of RJ to DNP-KLH mice increased ***IL*** - ***12*** p40 mRNA expression and NO production, and decreased PG E2 production from ***macrophages*** as compared to untreated DNP-KLH mice. These results suggested that RJ suppressed antigen-specific Ig E production and histamine release from mast cells in association with the restoration of ***macrophage*** function and improvement of Th1/ ***Th2*** cell responses in DNP-KLH mice.

L8 ANSWER 3 OF 5 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 2001364628 MEDLINE

DOCUMENT NUMBER: 21315494 PubMed ID: 11422207
TITLE: Regulation of LPS induced IL-12 production by IFN-gamma and IL-4 through intracellular glutathione status in human alveolar macrophages.
AUTHOR: Dobashi K; Aihara M; Araki T; Shimizu Y; Utsugi M; Iizuka K; Murata Y; Hamuro J; Nakazawa T; Mori M
CORPORATE SOURCE: First Department of Internal Medicine, Gunma University Faculty of Medicine, School of Medicine, Maebashi, Gunma, Japan.. dobashik@med.gunma-u.ac.jp
SOURCE: CLINICAL AND EXPERIMENTAL IMMUNOLOGY, (2001 May) 124 (2) 290-6.
Journal code: 0057202. ISSN: 0009-9104.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200107
ENTRY DATE: Entered STN: 20010716
Last Updated on STN: 20010716
Entered Medline: 20010712

AB Interleukin-12 ( ***IL*** - ***12*** ) is secreted from monocytes and ***macrophages*** ; it exerts pleiotropic effects on T cells and natural killer (NK) cells, and stimulates interferon-gamma (IFN-gamma) secretion. Glutathione tripeptide regulates the intracellular redox status and other aspects of cell physiology. We examined whether IFN-gamma and IL-4 affect the balance between intracellular reduced glutathione ( ***GSH*** ) and oxidized (GSSG) glutathione, as this may affect ***IL*** - ***12*** production in human alveolar ***macrophages*** (AM). We used both AM from healthy non-smokers obtained by bronchoalveolar lavage and the monocytic THP-1 cell line in this study. Incubation of AM for 2 h with the ***GSH*** precursor N-acetylcysteine (NAC) increased the intracellular ***GSH*** /GSSG ratio, and enhanced lipopolysaccharide (LPS)-induced ***IL*** - ***12*** secretion by AM. In THP-1 cells, NAC increased the ***GSH*** /GSSG ratio and the expression of LPS-induced ***IL*** - ***12*** mRNA, whereas L-buthionine-[S,R]-sulphoximine (BSO) decreased these. NAC and BSO offset their own effects on the intracellular ***GSH*** /GSSG ratio and the expression of LPS-induced ***IL*** - ***12*** mRNA. Furthermore, exposure of AM to the helper T cell type 1 (Th1) cytokine IFN-gamma or the helper T cell type 2 ( ***Th2*** ) cytokine IL-4 for 72 h increased and decreased the ***GSH*** /GSSG ratio, respectively. Lipopolysaccharide (LPS)-induced secretion of ***IL*** - ***12*** in AM was enhanced by IFN-gamma but inhibited by IL-4. These results suggest that IFN-gamma and IL-4 oppositely affect the ***GSH*** /GSSG balance, which may regulate ***IL*** - ***12*** secretion from AM in response to LPS.

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
ACCESSION NUMBER: 1999:712139 CAPLUS
DOCUMENT NUMBER: 132:221210
TITLE: The triggering and healing of tumor stromal inflammatory reactions regulated by oxidative and reductive macrophages
AUTHOR(S): Hamuro, Junji; Murata, Yukie; Suzuki, Manabu; Takatsuki, Fumihiko; Suga, Tetsuya
CORPORATE SOURCE: Basic Research Laboratories, Ajinomoto Co., Inc., Kanagawa, 210-0801, Japan
SOURCE: Gann Monograph on Cancer Research (1999), 48(Recent Advances of Human Tumor Immunology and Immunotherapy), 153-164
CODEN: GMCRDC; ISSN: 0072-0151
PUBLISHER: Japan Scientific Societies Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Pre- and post-operative administration of lentinan (LNT) in combination with interleukin-2 (IL-2) showed complete cure in murine tumor models due to synergistic augmentation of the tumor tissue stromal reaction including lymphoreticular infiltrates and the formation of reticular fibers. The cellular reactions at tumor tissues are frequently accompanied by the conversion of the reaction into an oxidative inflammatory reaction by locally produced cytokines. LNT induced ***macrophages*** (M.vphi.s) showed reduced release of prostaglandins and ***IL*** - ***6*** , while they showed elevated prodn. of ***IL*** - ***12*** , due to the

increase of cellular glutathione ( ***GSH*** ). Conversely, lipopolysaccharide (LPS) induced ***macrophages*** with reduced ***GSH*** content. M.vphi.s with a high content of ***GSH*** are called reductive M.vphi.s and those with a reduced amt. oxidative M.vphi.s. Helper T cell type 1, 2 (TH1/ ***TH2*** ) balance is largely regulated by the balance between reductive and oxidative M.vphi.s through the balance of the prodn. of ***IL*** - ***12*** vs. ***IL*** - ***6*** from M.vphi.s. To keep tumor specific immune response working efficiently, it may be important to maintain the TH1 responses and the predominance of a reductive form of M.vphi. in tumor tissue stromal inflammation, in the context of tissue remodelling after extravasation and infiltration of immune cells into tumor tissues.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 5 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96170609 EMBASE
DOCUMENT NUMBER: 1996170609
TITLE: Lentinan regulates the local inflammatory cellular reaction at tumor tissues - Its relation with antitumor effects.
AUTHOR: Hamuro J.
CORPORATE SOURCE: Ajinomoto Co., Inc., Basic Research Institute, 1-1 Suzuki-cho,Kawasaki-ku, Kawasaki 210, Japan
SOURCE: Biotherapy, (1996) 10/4 (581-588).
ISSN: 0914-2223 CODEN: BITPE
COUNTRY: Japan
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 016 Cancer
026 Immunology, Serology and Transplantation
LANGUAGE: Japanese
SUMMARY LANGUAGE: English; Japanese

AB Either immunotherapy or chemotherapy requires anticachectic treatments to improve its therapeutic effects leading to life prolongation. Cachexia is mainly induced by oxidative local cellular inflammatory reactions at tumor tissues by production of PGE2, reactive oxygen intermediates and cachectic/immunosuppressive cytokines such as ***IL*** - ***6*** , IL-1, TNF and TGF-.beta.. To induce the efficient specific immunological responses to tumor antigens, it is necessary to induce cellular reactions at tumor tissues to break the dormant state (ignorance of tumor antigens by host immune systems). The induction of cellular reactions at tumor tissues is confronted frequently with the conversion of cellular reactions into oxidative inflammatory reactions via overactivation of ***macrophages*** (M.phi.) and neutrophils. Lentinan suppresses the conversion and maintain the redox state of M.phi. at the reduced state designated by the high content of the reduced form of glutathione ( ***GSH*** ). M.phi.s with the high content of ***GSH*** respond to TH1 cytokines to produce an increased amount of NO and a reduced amount of ***IL*** - ***6*** , whereas M.phi.s with decreased ***GSH*** content respond in a manner resulting in inverse effects. In the advanced stage of cancer patients, the oxidative M.phi.s are responsible for the induction of ***TH2*** cytokines responses resulting in the induction of cachexia.

=> d his

(FILE 'HOME' ENTERED AT 14:42:50 ON 07 NOV 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 14:43:29 ON 07 NOV 2002

L1 579964 S MACROPHAGE
L2 66366 S (REDUCTIVE GLUTATHIONE) OR GSH
L3 1015 S L1 (P) L2
L4 45057 S TH2
L5 26 S L3 (P) L4
L6 125526 S IL-6 OR IL-12
L7 17 S L5 (P) L6
L8 5 DUPLICATE REMOVE L7 (12 DUPLICATES REMOVED)

=> s cellular immune response
L9 20498 CELLULAR IMMUNE RESPONSE

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=> s l9 (p) l5
L10           0 L9 (P) L5

=> s (gastrointestinal inflammatory disease) or (chronic rheumatoid arthritis) or hepatitis or (he
   5 FILES SEARCHED...
L11      409933 (GASTROINTESTINAL INFLAMMATORY DISEASE) OR (CHRONIC RHEUMATOID
                ARTHRITIS) OR HEPATITIS OR (HEPATIC CIRRHOSIS)

=> s l5 (p) l11
L12           0 L5 (P) L11

=> d his

     (FILE 'HOME' ENTERED AT 14:42:50 ON 07 NOV 2002)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     14:43:29 ON 07 NOV 2002
L1        579964 S MACROPHAGE
L2         66366 S (REDUCTIVE GLUTATHIONE) OR GSH
L3          1015 S L1 (P) L2
L4         45057 S TH2
L5            26 S L3 (P) L4
L6        125526 S IL-6 OR IL-12
L7            17 S L5 (P) L6
L8             5 DUPLICATE REMOVE L7 (12 DUPLICATES REMOVED)
L9         20498 S CELLULAR IMMUNE RESPONSE
L10            0 S L9 (P) L5
L11       409933 S (GASTROINTESTINAL INFLAMMATORY DISEASE) OR (CHRONIC RHEUMATOI
L12            0 S L5 (P) L11

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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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FULL ESTIMATED COST                                   48.42      48.63

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